Decide whether the following statements are correct or incorrect. If incorrect, explain why or change the statement to make it correct.

- 1. Meteors are falling stars.
- 2. The galaxy is crowded.
- 3. The sun is always directly south at 12:00 noon.
- 4. Rain comes from clouds sweating.
- 5. Color is a property of an object, and is independent of the illuminating light and the receiver (eye).
- 6. Positively charged objects have gained protons (not deficient in electrons).
- 7. Gravitational forces are stronger than electrostatic forces.
- 8. An object at rest has no energy.
- 9. Gravitational potential energy depends only on the height of an object.
- 10. The motion of an object is always in the direction of the net force applied to the object.
- 11. Acceleration always occurs in the same direction as an object is moving.
- 12. Heat is not energy.
- 13. Heat and temperature are the same.
- 14. Light is associated with either a source or its effects. Light does not exist independently in space (light does not "travel").
- 15. An object is "seen" because light shines on it. Light is a necessary condition for seeing an object.

Decide whether the following statements are correct or incorrect. If incorrect, explain why or change the statement to make it correct.

- 16. When a wave moves through a medium, particles of the medium move along with the wave.
- 17. The size of the image depends on the size (diameter) of the lens.
- 18. Gamma rays, x-rays, ultraviolet light, visible light, infrared light, microwaves and radio waves are all very different entities.
- 19. When two pulses, traveling in opposite directions along a spring or rope meet, they bounce off each other and go back in the opposite direction.
- 20. Larger magnets are stronger than smaller magnets.
- 21. The magnetic pole of the earth in the northern hemisphere is a north pole, and the pole in the southern hemisphere is a south pole.
- 22. Any quantity can be measured as accurately as you want.
- 23. Mass is a quantity that you get by weighing an object.
- 24. Rockets in space require a constant force.
- 25. The amount of daylight increases each day of summer.
- 26. Different countries see different phases of the moon on the same day.
- 27. Phases of the moon are caused by a shadow from the earth.
- 28. Seasons are caused by the earth's distance from the sun.
- 29. The earth is flat.